valleys of the slope. Black cottonwood (Populus trichocarpa), and western sycamore (Platanus racemosa) are found in the larger ravines. A single tree of Libocedrus decurrens was discovered growing in a ravine at an altitude of about 2000 feet. No other coniferous trees are to be found on Roderick Mountain, as far as I know; Bigcone Spruce (Pseudotsuga macrocarpa) grows a mile or two farther east on rocky out-croppings on the same side of the river.

My attention was called to the madroños of this locality by descriptions of "manzanita trees" said to be growing there by persons well acquainted with the region. Three trips were taken to the locality. The first, on January 1, 1931, was fruitful in the discovery of a single madroño (from which I took leaf specimens) and in catching sight of the larger groups of these trees growing high on the slope. Desirous of reaching these more extensive groups of larger trees I made a second trip on March 10. Although my objective was not attained, due to the density of the chaparral, I succeeded in reaching the patch of madroños growing high on the west end of the slope, and the uppermost in the ravine below it. It was gratifying to find the madroños blooming profusely at this time. In order to get a more general idea of the distribution of the madroños growing here, a third trip was taken by climbing a hill to the north of Roderick Mountain, from which an unobstructed view may be had of the whole extent of the northwest slope. The clumps of madroños, although a half mile or more away, were easily distinguishable from the rest of the vegetation, which, incidentally, was remarkably green for midsummer, by now July 30. The madroños in the more favorably located spots were in perfect condition at this time, but some of the trees in the drier locations showed evidence of drought.

October 12, 1931.

THE ROAD TO CIMA

MARY BEAL

There were four of us that started from Barstow on May 22, 1931, for a trip to Cima in the eastern Mohave Desert near the Providence Mountains, Miss A. L. Waterman, Mr. Irving Scott Jr., Mr. Herbert Manson and myself. It was a wonderful trip for scenery and a treat, even if we had not seen a flower. All of us were fascinated by the country and one of the delights was the surprise of it. We hadn't expected anything like it. About ten miles beyond Cronese Valley we came upon smoke trees'—many of them, in a wash leading from the mountains into Soda Lake basin. They are full of buds and I saw a few flashes of violet, but only a few. We want very much to go down in a week or so to see them in bloom. On the long climb from Baker to Halloran Springs and on to the summit^{*} we found

¹ Parosela spinosa Hel. (W.L.J.).

² Yucca Grove station, about 2 miles easterly from Halloran Springs, where the road crosses the southerly extension of the Shadow Mountains (W.L.J.).

flowers, Stanleya pinnata, Mirabilis Froebelli (bright purple), Petalonyx, Hugelia, Chaenactis, Isomeris arborea in pod; and the creosote^{*} bushes were so green and large, in full bloom. In the joshua forest beyond Halloran Springs we found beautiful plants of Baileya multiradiata, 18 inches high and over, with clear yellow blooms from an inch to an inch and three-quarters across. There were other lovely things of which I caught sight and intended to get as we returned but it was too late. We hadn't half time enough. On the other side of the summit and on the Cima road for a few miles we found good specimens of Psilostrophe, the first I had ever seen. Near there I found the pleniradiata variety of Baileya multiradiata, the species being our common one around Barstow. From the summit to Cima we met many new things: first of all we marveled at the joshua forest, the largest^{*} we had ever found in the desert—at least 12 miles in length and several miles wide—I believe eight or ten miles in places, and I think it joins the forest that stretches from the summit to a few miles above Halloran Springs. The one thing most noticeable about it was the habit of growth, the trees did not spread out their branches and make bushy trees like Mr. Hemis's "apple orchard" at Coolgardie, at least few of them did. Their branches are strongly ascending. It interested us much. We found a number of clumps of Cereus Mojavensis, one of 100 or more stems, in bloom. The only place I have found them before is at Ord Mountain between the camp and the spring. We also found grizzly bear cactus (Opuntia ursina) in bloom, no large clumps as at Ord, but a few scattered smaller ones. Then we found Mammilaria in bloom-not the fish-hook, but M. deserti and M. Alversonii.

We saw a few Opuntia Mojavensis and many of cholla-like growth with longer joints, which seemed to fit in no exact species in the Manual. I found Leucelene ericoides in the forest, my first acquain-

⁶A reference to the grove of very remarkable and large trees of this species on the Coolgardie yucca mesa in the Calico Mountains (W.L.J.).

³Larrea tridentata var. glutinosa Jepson (W.L.J.).

⁴Yucca brevifolia Engelm. (W.L.J.).

⁶ The Joshua Forest about Cima.—This is a very remarkable forest and doubtless the largest in California. The great desert valley which lies between the southerly extension of the Shadow Mountains and the Ivanpah Mountains is filled from side to side with it. Thence it extends westerly over the ridge to Halloran Springs, easterly over the pass by Kessler Peak into the Ivanpah Valley about Cima. East of Yucca Grove station, one leaves the main road at Windmill road station on the broad valley floor and turns southerly. One now begins to get an increasingly impressive idea of the vastness of this yucca forest as he goes on. The slope ascends almost imperceptibly until one attains a summit between two peaks, Kessler Peak on the left, a prominent point in Ivanpah Mountains, and Teutonia Peak to the right. On the downward slope, easterly, into the Ivanpah Valley, the yucca trees are denser than I have ever seen them elsewhere—as one looks through the forest along the slope the trunks finally close the view, filling completely the vista. Everywhere else I have been able to look quite through a yucca forest to a further background. In the Ivanpah Valley the forest extends for a long distance north and south. Its limits have not as yet been defined.—W. L. JEPSON.

MADROÑO

tance with it, and a few orange mariposas (Calochortus Kennedyi). we so often see at Ord or around Hesperia, Oro Grande or Adelanto. I wanted more time there and I wanted to have time to go on beyond Cima on the road to Fenner, where we heard there were quantities of flowers only a few miles farther, but it was too late; we reached home quite late as it was. They had two to five inches of rain in that section a week or so ago, and it is reported full of bloom. That country is very interesting, high and rugged, with splendid mountain ranges all about. We all felt that we would like to explore it thoroughly. We saw many yuccas-one of which was still in bloom-Yucca baccata, and a few plants of Agave Utahensis, or what I took to be that, with barbed leaves, two individuals of which were in bloom near the summit road station, tall spikes of slender vellow flowers. We saw the loveliest color in bladder sage (Salazaria Mexicana) that I ever beheld-quantities of it that were a mass of opalescent jewels, a heavenly lavender and mauve, some more pink in hue, a rosy mauve, that fairly took one's breath.

Barstow, May 24, 1931.

We made the Cima trip again and I located the whereabouts of Agave Utahensis on Clark Mountain and the barrel cactus, but had no time to verify the field naming. The smoke trees (Parosela spinosa) are just getting into their swing, some quite lovely with a violet-blue veiling over them, others with buds not yet opening, hardly showing color. Even the specimens show how generously they are blooming and what a sight they are.

Leaving Cima. we went past the old Death Valley Mining Company's property and on through Cedar Cañon of the Mid Hills. next the Providence Mountains. We intended to go across to Fenner but were told the Goffs road was better. It was a splendid ride and before we came to the forks, we found many interesting plantsverbena (blue), the big four o'clocks, a striking Pentstemon Palmeri over four feet high-five. I do believe, a dozen or more of the long graceful stalks of bloom, swaying gently in the breeze. In the cañon we found apache plume (Fallugia paradoxa) and Tetradymnia comosa; such large Eriophyllum Wallacei, six inches and over across. On the hill we found Psilostrophe again, and again between Vontrigger and Goffs, and Baileya multiradiata and other flowers on the other side of Cima. The Krameria' I found there grew erect instead of spreading out in a low thorny bush like other Krameria I knew hitherto. The branches are more ascending without the sharp angles. The sample I collected has no fruit but the spines do not show conspicuously on the densely hairy ovary as they do almost at once in Krameria canescens growing around Barstow. I saw these erect ones only on the stretch between Vontrigger and Goffs, and all that I saw were of the ascending type of growth.

Barstow, June 1, 1931.

⁷Krameria glandulosa Rose & Painter (W.L.J.).